

IN THE CLAIMS:

Please enter the following amended claims:

1. (currently amended) An apparatus for plasma processing of a wafer, the wafer being disposed on a wafer holder during processing said process, the apparatus comprising:
an annular structure including an embedded magnet, the structure concentric with the wafer holder, the embedded magnet generating a magnetic field for deflecting charged particles incident on the structure and reducing plasma density in selected regions during plasma etching, thereby preventing damage to the structure by said particles and eliminating plasma from being present at edges of the wafer.
2. (original) An apparatus according to claim 1, wherein the magnet comprises a magnetic material embedded in said structure.
3. (original) An apparatus according to claim 1, wherein said annular structure is characterized as a ring, the ring having a groove formed therein, and the magnet is disposed in the groove.
4. (original) An apparatus according to claim 1, wherein the magnet is a permanent magnet.
5. (original) An apparatus according to claim 1, wherein the magnet is an electromagnet.
6. (original) An apparatus according to claim 1, wherein said structure is of a material susceptible to erosion during the plasma processing, so that the magnetic field reduces said erosion.
7. (original) An apparatus according to claim 1, wherein said structure is of a material selected from the group consisting of quartz, silicon, Y_2O_3 , silicon carbide and Al_2O_3 .

Please cancel claims 8-18

19. (new) An apparatus according to claim 1, wherein the magnetic field is axisymmetric.

20. (new) An apparatus according to claim 8, wherein the strength of the magnetic field is higher than 200G, the strength of the magnetic field reflect the plasma away from the edges of the wafer.